

## ARTIFACT SHEET

Enter artifact number below. Artifact number is application number + artifact type code (see list below) + sequential letter (A, B, C . . ). The first artifact folder for an artifact type receives the letter A, the second B, etc..  
Examples: 59123456PA, 59123456PB, 59123456ZA, 59123456ZB

09/464610 BA  
Indicate quantity of a single type of artifact received but not scanned. Create individual artifact folder/box and artifact number for each Artifact Type.

☐

CD(s) containing:

computer program listing

Doc Code: Computer

pages of specification

and/or sequence listing

and/or table

Doc Code: Artifact

content unspecified or combined

Doc Code: Artifact

☐

Artifact Type Code: P

☐

Artifact Type Code: S

☐

Artifact Type Code: U

☐

Stapled Set(s) Color Documents or B/W Photographs

Doc Code: Artifact    Artifact Type Code: C

☐

Microfilm(s)

Doc Code: Artifact    Artifact Type Code: F

☐

Video tape(s)

Doc Code: Artifact    Artifact Type Code: V

☐

Model(s)

Doc Code: Artifact    Artifact Type Code: M

☒

Bound Document(s)

Doc Code: Artifact    Artifact Type Code: B

☐

Confidential Information Disclosure Statement or Other Documents marked Proprietary, Trade Secrets, Subject to Protective Order, Material Submitted under MPEP 724.02, etc.

Doc Code: Artifact    Artifact Type Code X

☐

Other, description: \_\_\_\_\_

Doc Code: Artifact    Artifact Type Code: Z

UNITED STATES PATENT AND TRADEMARK OFFICE  
**CERTIFICATE OF CORRECTION**

PATENT NO. : 5,697,970  
DATED : December 16, 1997  
INVENTOR(S) : Schmitt et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 2, Line 21,

now reads, "cramps",  
should read --crimps--,

IN THE CLAIMS:

Claim 6, Line 9,

now reads " $C=[2(t \rightarrow 10)]^{-1}$ ",  
should read -- $C=[2(t \div 10)]^{-1}$ --.



Attest:  
*Mary H. Green*

Attesting Officer

Signed and Sealed this  
Twenty-first Day of April, 1998

*Bruce Lehman*

BRUCE LEHMAN

Commissioner of Patents and Trademarks



# The United States of America



## The Commissioner of Patents and Trademarks

*Has received an application for a patent for a new and useful invention. The title and description of the invention are enclosed. The requirements of law have been complied with, and it has been determined that a patent on the invention shall be granted under the law.*

*Therefore, this*

### United States Patent

*Grants to the person(s) having title to this patent the right to exclude others from making, using, offering for sale, or selling the invention throughout the United States of America or importing the invention into the United States of America for the term set forth below, subject to the payment of maintenance fees as provided by law.*

*If this application was filed prior to June 8, 1995, the term of this patent is the longer of seventeen years from the date of grant of this patent or twenty years from the earliest effective U.S. filing date of the application, subject to any statutory extension.*

*If this application was filed on or after June 8, 1995, the term of this patent is twenty years from the U.S. filing date, subject to any statutory extension. If the application contains a specific reference to an earlier filed application or applications under 35 U.S.C. 120, 121 or 365(c), the term of the patent is twenty years from the date on which the earliest application was filed, subject to any statutory extension.*

*Bence Lehman*

Commissioner of Patents and Trademarks

*Pandra Morton*

Attest



US005697970A

**United States Patent** [19]

Schmitt et al.

[11] **Patent Number:** **5,697,970**[45] **Date of Patent:** **Dec. 16, 1997**[54] **THINLY WOVEN FLEXIBLE GRAFT**[75] **Inventors:** **Peter J. Schmitt**, Garnerville, N.Y.;  
**Jose F. Nunez**, Kearny, N.J.[73] **Assignee:** **Meadox Medicals, Inc.**, Oakland, N.J.[21] **Appl. No.:** **650,783**[22] **Filed:** **May 20, 1996****Related U.S. Application Data**

[63] Continuation of Ser. No. 285,334, Aug. 2, 1994, abandoned.

[51] **Int. Cl.**<sup>6</sup> ..... **A61F 2/06**[52] **U.S. Cl.** ..... **623/1; 623/11; 623/12**[58] **Field of Search** ..... **623/1, 8, 9, 11,**  
**623/12, 66; 600/36, 37; 606/191, 194, 198**[56] **References Cited****U.S. PATENT DOCUMENTS**

3,105,492	10/1963	Jeckel	623/1
3,588,920	6/1971	Wesolowski	623/1
4,202,349	5/1980	Jones	623/1
4,545,082	10/1985	Hood	623/1

4,550,447	11/1985	Seiler, Jr. et al.	623/1
5,383,927	1/1995	De Goicoechea et al.	623/12
5,476,506	12/1995	Lunn	623/12

**FOREIGN PATENT DOCUMENTS**

2913510	10/1979	Germany	623/1
8303347	10/1983	WIPO	623/1
8806026	9/1991	WIPO	623/1

*Primary Examiner*—John G. Weiss*Assistant Examiner*—Francis K. Cuddihy*Attorney, Agent, or Firm*—Hoffmann & Baron, LLP[57] **ABSTRACT**

A thinly woven textile prosthetic implant such as a vascular graft may be implanted by catheter implantation. The implant includes an elongate tubular body formed of a woven fabric having a fabric thickness no greater than about 0.16 mm. The tubular body includes a series of longitudinally spaced wave-like generally uniform crimps along the length thereof. The crimps are disposed at a fine pitch along the length of the tubular body. The amplitude of the crimps is relatively small thus reducing the formation of thrombus and plaque on the inside of the implant.

**16 Claims, 2 Drawing Sheets**